Published monthly by the Nautical Research Guild, an organization dedicated to the Era of Sail, and distributed free to Members only. Annual Membership is five dollars.
Address all communications relative to the Secretary's Monthly Letter to R. A. Nash, Secretary-Treasurer, 20 S. Baldwin Ave., Sierra Madre, Calif., U.S.A.

Volume I November, 1948 Number 10

CHESAPEAKE BAY OYSTER SLOOP "AGNES"

Wayne B. Yarnall

It is to the oyster that thanks are due for preserving the longevity of sail in the Chesapeake Bay area. After the Civil War the Maryland Legislature passed a bill allowing the use of the dredge in the Bay in waters over fifteen feet in depth. At the same time they prohibited the use of steam motive power in working the public beds. Thus, even today, the survivals of sail can be found dredging the floor of the Bay for "shell gold", with the law keeping their jibs and mainsails up. It is true that the vessels are now fifty and sixty years old and each year sees fewer coasting over the waters, but in this area the bateaux, bugeyes and sloops can still be found, unchanged and unique.

The most common vessels of the Chesapeake Bay have been overshadowed by the Baltimore Clippers of the early part of the 19th century. Little attention has been paid, however, to the work boat, even though it's utility and length of service has been much greater.

The sloop AGNES falls within the category of the work boat. She was designed and built for oyster dredging in the Chesapeake Bay and was a boat that was fast, handy and capable. She was one that could show her heels to the best of equal size in any waters and under almost any conditions. As one of her owners said "The rougher and tougher the goin', the faster she went". The AGNES was a centerboard sloop, skipjack rigged. She was designed and built in 1898 by John B. Harrison at his yard at Tilghman's Island, Talbot County, Eastern Shore of Maryland and was 43'x14'x3', designed to carry 400 bushels of oysters. She was one of four vessels of this type he built, all of different sizes. Some years back she was called a round-stern bugeye by a contemporary writer. This statement was incorrect for she was designed and built as a sloop.

The vessel could not have had a better designer and builder, for John Harrison, blessed with the teachings of his intelligent ship-building father, Joseph L. Harrison, had also an inquiring mind and a gifted eye for lines. He was famed for his bugeyes and attempted to improve the design of each successive vessel he built, resulting in the majority of his craft exceeding the average boat in speed and beauty. Some of the old timers said that in many instances he laid down the lines of a proposed vessel in the sands of the beach with a sharp-pointed stick. Taking his measurements from this rough sketch and transferring them to a mold loft, he was able to fair them out and produce a speedy and seaworthy work boat. Today, John Harrison has gone and the AGNES too, but he left his mark with his last creation, the log canoe JAY DEE. This latter is still racing in the Eastern Shore waters and has yet to be beaten by any local sailboat of equal size in any kind of weather.

The statistical data of the life of the sloop AGNES has been well recorded for an obscure vessel of this type. She was built for Captain Tom Taylor of Tilghman's Island who owned her for five years, and then sold her to Captain Len Collins. Len Collins sold her to Captain Arlie Baker in April, 1919. Up to the time that Baker bought her, she was strictly a work boat, oystering in the winter and hauling watermelons in the summer. It was while she was in the possession of Captain Baker that her true qualities were brought out and her fame was spread from one end of the Bay to the other.

After each boat of the oyster fleet dredged it's load, the race to market began. This race was the same as the Gloucester fishing vessels had each time they returned from the Banks. From 1919 until she was sold again, Captain Baker led the race to market and beat with regularity the sloops and bugeyes of the fleet. Many is the vessel that has tried to out-sail her in all kinds of weather, in an impromptu brush during working hours or a friendly week-end sail. With very few exceptions, in light or heavy airs, the AGNES whipped them all. As a result, she was known and rightfully so as the fastest boat on the Bay. Credit must be given her, but at the same time it must be recognized that Captain Arlie Baker is one of the smartest sailing masters in that area. So, it was a combination of boat and man that produced the speed.

In 1920 the Miles River Yacht Club and the Baltimore Sun inaugurated the yearly races for work boats of all classes in the Chesapeake Bay. The prize given the boat which was first was a new set of sails. The AGNES went home with it, winning by such a wide margin that the NELLIE BIRD that was second might just as well have been last. The next year, 1921, the AGNES appeared with her new suit of sails (made by Steve MaGee of Baltimore) ready for the work boat races. However, the wind was so light that the races were called off. In 1922, the last year of the races, the weather was very rough and squally. A little liquored up, the captains of the other boats in the race attempted to talk Captain Baker into staying out of the contest, feeling that the small sloop would be no match for the larger boats in such rough waters. Their words were of no avail, and the race started. It seems that the more it blew the faster the AGNES went. Arlie says that he was younger then and willing to take more chances than he would today. So, he loaded on the sail and shot home the winner. That was the end of the workboat races, leaving the AGNES in the enviable position of undisputed champion of the oyster fleet.

The years rolled on until 1936 when times were tough for the oystermen. The AGNES was in need of repairs estimated to cost $2000. This was too much for Captsin Baker so the boat went up for sale and was purchased by Captain William Jones. Jones kept her one year and sold her to Captain William Bradford of Cambridge, Md. She continued dredging for oysters and laying up each summer.

Captain Bradford did not have her long before the end came. On Feb. 3, 1939 the oyster fleet was laying at anchor, becalmed in the mouth of the Choptank River. Captain Arlie

Baker in the bateau LENA ROSE was with the fleet and the AGNES was laying to about three to four hundred feet astern the LENA ROSE. In the words of Captain Baker, this is how the AGNES met her doom:

"It was a little foggy and no wind. The barometer in my LENA ROSE started to fall and she hit the bottom. At once I took all sail in and tied off the anchor cable. It was a sudden squall and the wind hit us all at once. Under a bare pole, I rode along with the wind. I looked back at the AGNES and saw that Bill Bradford was too late in getting the mainsail in. The sail was up and he and his four colored hands were trying to get it down. As I watched, the boat gathered speed and went the fastest I have ever seen her go. Before my eyes, she just sailed down into the water until finally she pitch poled. Her speed was too great. After the blow I sailed back to the place she went down and all I found was a hatch cover and a hat. Bill Bradford and his four hands went down with her."

Captain Carlie Baker was an eyewitness to the loss of his old AGNES. I checked the velocity of the wind at the Cambridge Yacht Club and it was recorded that it blew 62 M.P.H. for three and one half minutes on the day of the loss.

The career of the sloop did not end on the bottom of the Bay. A year later, Johnson and Son, dock builders and salvagers, out of cambridge, raised her from the bottom. She was intact, although racked and strained. They took her to their marine railway with the idea of repairing her for Captain Bradford's heirs. This ended in an argument, for the heirs refused to have her repaired and Johnson and Son collected nothing for their pains. Thereupon she was taken off the railway and set on the beach. The following year, the darkies broke her up for firewood and the fastest sloop of the Bay went up in smoke.

It was while she was on the marine railway that her lines were taken off. Thus, with a record of service, speed, fame, and final loss with all hands, we are fortunate in possessing her lines and details. It is from those lines that my model was made. From this decorative facsimile half-model we can describe a few of her features.

The AGNES had a shoal draft, centerboard hull, skipjack rigged. The head was the usual Chesapeake Bay type: Long stem, hogged tapering bowsprit, billet head and trail board mouldings. For reasons of economy, the builder did not include carved trail boards or figurehead.

The deck had considerable crown and was clear and well suited for the loading of oysters and handling of the dredges and winder. The Sampson post was small and supported a small anchor windlass. Forward of the mast was the jib sheet traveler. Abaft the mast was the small cuddy with a warming stove inside. Over the centerboard case was the large hatch. The small hatch was located forward of the main cabin.

The Simon Lake steering gear was inside a box with the usual eight spoke wheel. The monkey rail ran from the combination knight head and hawse piece to the dredge rollers and from these to the stern. A fly rail surrounded the main cabin and the stern. The davits for the "push boat" were mounted on the patent stern.

The original mast was 57 feet long and the boom 45 feet long. Captain Baker later made the mast 61 feet long and the boom 46 feet long. The AGNES was skipjack rigged (leg-o-mutton sail and jib sail) the only change being the addition of a flying jib in 1921. The paint scheme was white above the water line and copper paint below.

All in all the AGNES was a trim speedy vessel, capable of profitably engaging in the oyster trade.

My model is made to the scale of ½" = 1'-0", giving an overall length of 32". It is mounted on an oak backboard and the stainless steel name-plate is etched as follows:-

Chesapeake Bay Oyster Sloop

AGNES

of Cambridge, Maryland

Scale ½" = 1' -0"

1898 1939

SEA CANNON THROUGH THE AGES. PART VIII.

Winthrop Pratt, Jr.

QUARTER CANNON. Sir Jonas Moore, 1694, says these were actually 8 to 12 pounder sakers. They seem to have been generally a bit longer than the saker or between the saker and the demi culverin - actually a bastard culverin.

QUARTER-HUNG. A gun wherein the axis of the trunnions is below the axis of the bore.

RABINET. Also spelled Robinet, Rabonet, and these forms sometimes appear with doubled letter "B". Etymology dubious. Ffoulkes thinks it possibly derives from the pugnacious robin-redbreast of England. Rabonet may come from old French rabonnir, to improve or to better. Of interest also is the Latin roborare (robur-oris, strength). An English gun used from the 16th to the 18th centuries. Ffoulkes says they were made at the Heathfield works as late as 1735, while Norton lists them in 1585, and Capt. John Smith mentions them in 1627. Rowan says they were generally breech loading in the 16th century, and Middlebrook speaks of them in America ca. 1775-83. Hanson, Mountaine and Muller do not list them. Rabinets seem generally to have been about 3 ft. long, of iron, and used an iron ball varying from ½ lb. to 1 lb. in weight. The bore is variously listed as 1", 1⅛", and 1¼". They were generally used as swivels. (Compare with the French Emerillon, ½ pdr., of 1½" bore and 200 lbs. weight.) Hammersly says rabinets were used for ship's barricades.

RIBADEQUIN. French, may possibly derive from ribaud, ribald, or from ribambelle, a long string, but etymology uncertain. St. Remy, 1745, lists this as an ancient type and gives two examples: 1. A 1 pdr., 8 ft. long, of 750 lbs. weight, and 2. A ½ pdr., 6 ft. long, of 450 lbs. weight. From this it seems that they may have resembled the arquebus a croc, but I find no other mention of the piece in any standard work. The name was also applied to an ancient crossbow.

RIFLE - RIFLING. A gun is said to have a rifled barrel when the inner surface of the bore is formed with a series of spiral grooves. There have been many variations of this process since its inception in the early 18th century, possibly a bit earlier for some hand-guns like the carrabine. The term rifle was later used to denote any piece so treated, as a "six inch rifle" (a 6" rifled cannon), and an "infantry rifle" (a hand-gun carried by infantry).

RING-TAIL SAKER. See saker.

ROBINET. See rabinet.

RODMAN GUN. After its inventor. An American 19th century smooth-bore muzzle loading cannon of the Civil War period, of the same general appearance as the Dahlgren gun. Very says that the 15" Rodman gun was used exclusively as the turret gun during the war. See tables.

ROYAL. A type of mortar. See mortar.

ROYAL. See cannon royal.

SAKER. French sacre, Italian sacri. After the saker-hawk. A gun originating in the 15th or early 16th century. Sakers ranged from 4 to 12 pdrs., their lengths varying from about 6' 11" to 13', and were in use up to the latter part of the 18th century. Tartaglia lists 10 and 12 pdrs., Bourne, 1585, lists 5 to 7 pdrs., and Moore (who in 1694 calls them quarter-culverins) says they were 8 to 12 pdrs. St. Remy, 1745, refers to them as "ancient" and says they were 5 pdrs., 13 ft. long. Hansen in 1780, gives a caliber of 3.5" (about a 4 1/5 to 4 1/4 pdr.) and a length of 9 feet, nearly like a minion but a bit longer. Middlebrook says iron sakers were in use during the American Revolution – 6 pdrs., 8 feet long, but adds that guns were then usually listed by weight of shot, as 6 pdrs., etc. Campbell says that sakers and minions were cannon guns for merchant vessels at the time of the Armada (1585). Ffoulkes speaks of a saker-drake (a large saker) in 1643.

SAKERET. A small saker.

SARPENTINE. A Serpentine.

SERPENTIN. Farrow says a lin-stock fireworks of the rocket type. Do not confuse with serpentine.

SERPENTINE. From serpent (due to their small caliber and great length.) Originating in the 15th century, these pieces were, perhaps, the most numerous of the early guns, as many as 110 or more often being mounted on a single ship. The serpentines were of the built-up type, generally, and were breech loaders, although there were some cast pieces of iron and brass. They are listed in the 16th century as ½ and 1/3 pdrs., 1" to 1½" bore, and about 200–400 lbs. in weight, and 6 to 7 ft. long. (The cannon serpentine which is said to have been the precursor of the culverin, was a much larger gun, and should not be confused with the serpentine.) John Smith, in 1627, says that they were best for defense and field pieces, and implies that they were carriage-mounted.

Farrow describes another type of serpentine as a very ancient match-lock wall piece, 6 to 7 ft. long, weighing 100 to 200 lbs., and firing an 8 ounce lead ball.

SERPENTIX. The cock or lock of a very ancient match-lock

piece. ..lso probably another name for the cannon serpentine, as measurements given by most authorities are identical.

SERPENTS. ..nother name for the handles or dolphins on a gun, especially when in the form of serpents, as on the cannon serpentine.

SHELL GUN. .. type of gun developed in the first half of the 19th century, and designed to fire shells instead of solid shot. These guns first appeared in the U.S. Navy about 1841. See also Dahlgren, Paixhans, Rodman, etc.

SHORT GUN. Next below the medium gun in length.

SHRIMP. ..n early 16th century piece mentioned by Ffoulkes. I find no further description of it, but would suppose it to be small, perhaps one of the hand guns, or possibly even another name for a better-known type.

SLING. From German schlange, a serpent. Used from the 15th to the 17th century. Rowan says that they were in use during the reign of Henry VIII, 1509-1547, and believes them to have been of the perier type. There were also demi-slings or half slings, and the Great Elizabeth of 1514 mounted six iron breech-loading slings of 979 lbs. weight including two chambers for each gun. Capt. John Smith, in 1627, describes the piece as a breech-loader, using a separate chamber of brass or iron, and firing a "case" of stones, shot, etc. He implies that they were not usual at that time. See also chamber.

SP..RROW. Possibly a connection with musket from moschetto, Italian for sparrow-hawk. Ffoulkes and Norton both, mention this piece, but I have no description. (Farrow writes of the sparum, ancient darts fired in a volley from the cross-bow.

SP..RUM. See sparrow.

SPRING..LE. Perhaps same as espingare or espingard, but both may derive from the original use of the word springale which was an engine like a balista, a type of catapult. De la Gravierre says it came into use after 1340, and was part of the armament of the galleys.

(To be continued.)

THE MENSING COLLECTION OF ANCIENT SCIENTIFIC INSTRUMENTS

Robert A. Nash

In the May number of the Secretary's Monthly Letter mention was made of a collection of scientific instruments up for sale in the Los Angeles area. I have recently had an opportunity to examine this fine collection and present here catalog descriptions of the instruments associated with navigation, cartography, astronomy, etc. The original Mensing Collection included not only these pieces currently for sale, but the collection at the Adler Planetarium in Chicago as well.

1. ASTRONOMICAL TIME PIECE.
   Gilt brass, 16th century.
2. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Circular engraved brass dore au feu (gilt by fire). Signed, Casparus Buschmann, Automatarian in Augusta 1621 (Conspicuous member of the clockmaker family Buschmann, see Catalog Mensing, p. 60). Ref.: Cat. Mensing No. 292 and Rohde: Scientific Instruments, pl. 10. Diameter 7½ centimetres.
3. HORIZONTAL SUN DIAL.
   Quadrangular engraved brass dore au feu. Signed: Udalricus Schniep from Monaco Anno 1586 (Maker of instruments richly and perfectly executed", Cat. H. Michel, p. 100). Ref.: Cat. Mensing No. 243 and Rohde, pls. 11 and 14. 8 by 6½ centimetres.
4. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Quadrangular engraved brass, dore au feu. Signed: du Ferrier 1607 (Clockmaker to Louis XIII. "Antoine Ferrier was talented and enjoyed an excellent reputation", Cat. H. Michel, p. 91). 8½ by 8½ centimetres.
5. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Oval shaped engraved brass dore au feu. Partly illegible signature and date: Ch. Chavyn ? from Fontainebleau 1600. 7½ by 6½ centimetres.
6. HALF-CIRCULAR DIOPTER-INSTRUMENT.
   For angle measuring with affixed quadrant (squadra mobile). Painted wood, Italian.
7. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Quadrangular, engraved brass dore au feu. German, 16th century, 10 by 7½ centimetres.
8. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Square, engraved brass. French, early 17th century, 13½ by 13½ centimetres.
9. ASTRONOMICAL CALENDAR POCKET NECESSAIRE.
   Circular, engraved brass dore au feu. Signed: EH

(probably Erasmus Habermel). See Rohde p. 113. German, 16th century. Diameter, 4½ centimetres.

10. HORIZONTAL SUN DIAL.
Rectangular plate, engraved brass dore au feu, German, date A. D. 1627, 8½ by 11½ centimetres.

11. EQUATORIAL SUN DIAL.
Square plate, engraved brass dore au feu. Signed: Erasmus Habermel Fecit. Late 16th century. Ref.: Coll. Strozz, No. 355 (Nothing definite is known about this admirable artist who constructed the most beautiful instruments in existence. Cat. H. Michel, p. 93). 12 by 12 centimetres.

12. POCKET CALENDAR.
Oblong plate, engraved brass dore au feu. Signed: Erasmus Habermel Fecit 1586. Ref.: Coll. Strozzi, No. 358. 10 by 7½ centimetres.

13. GUN TANGENT SIGHT.
Engraved brass dore au feu. Signed: H. Govaerdt anno 1607. Ref.: Coll. Spitzer No. 381 (Auction Fred Muller, 28-30 Nov. 1911). 10½ by 15 centimetres.

14. GUN TANGENT SIGHT.
Engraved brass dore au feu. German, 16th century. 9½ by 5½ centimetres.

15. GUN TANGENT SIGHT.
Engraved brass, dore au feu. German, 16th century. 10½ by 17 centimetres.

16. NOCTILABIUM.
Engraved brass, dore au feu. Signed: Gig. Mariotta Roma 1589. Ref.: Coll. Mensing No. 331 and Coll. H. Michel p. 77. Diameter 11 centimetres.

17. RECTANGULAR DIOPTER ANGLE MEASURING INSTRUMENT.
Engraved copper, with coat of arms of the house of Savoy. Signed: F. Maretz Aix, abt. 1600. Ref.: Cat. Mensing, No. 157. 22 by 11½ centimetres.

18. EQUATORIAL SUN DIAL.
Hexagonal engraved brass, dore au feu with silver. Signed: Nicolaus Rugendas in Augspurg, 17th century. Ref.: Pl. 28 in Rohde. Diameter 6 centimetres.

19. EQUATORIAL SUN DIAL.
Octagonal engraved brass. Signed: Lorenz Graszl, Augsburg, 18th century. In original leather case. Diameter 6 centimetres.

20. HORIZONTAL SUN DIAL.
Octagonal engraved silver with gilt brass gnomon. French, abt. 1700 in the style of Butterfield and Chapopot. Ref.: Pl. 25, Rohde. 5½ by 4½ centimetres.

21. HORIZONTAL SUN DIAL.
Round, engraved silver with ivory box, Dutch, abt. 1750. Diameter 5½ centimetres.

22. HORIZONTAL AND VERTICAL SUN DIAL.
Rectangular engraved ivory. Signed: Michael Losel with crown. (The master sign of Paulus Reinmann of Nurnberg, end of 16th century, see Rohde, p. 113). Ref.: Pls. 19 and 21 in Rohde and pl. 48 at Wassermann-Jordan's. 5¾ by 4½ centimetres. H. Michel writes about P. Reinmann, p. 99: "The best of a famous family of quadrant makers. His work pieces are admirably executed".

23. HORIZONTAL AND VERTICAL SUN DIAL.
Engraved silver in the form of a cross. Prob. Italian, 17th century. 4⅝ by 5½ centimetres.

24. HORIZONTAL AND VERTICAL SUN DIAL.
Rectangular palm-word pasted over with copper. Plate (colored). German, 18th century. 4½ by 5½ centimetres.

25. HORIZONTAL SUN DIAL.
Round, engraved ivory with brass mountings on ebony bar. German, signed: T R W 1583. Diameter 8½ centimetres, length 29 centimetres.

26. HORIZONTAL SUN DIAL.
Round, engraved brass mounted in brass box. Prob. German, 17th century. Diameter 3¾ centimetres.

27. ETERNAL CALENDAR.
Round, engraved silver. Dutch, late 17th century. Ref.: Pl. 128 Rohde. Diameter 5 centimetres.

28. ETERNAL CALENDAR.
Engraved brass (in the shape of a watch key), dore au feu, German, 18th century. Diameter 1¾ centimetres.

29. HORIZONTAL SUN DIAL WITH ETERNAL CALENDAR.
Round, painted cardboard in painted wooden box. German, 18th century. (Sealing wax stamp on edge of box with monogram F. R. W. and Liegnietz). Diameter 8½ centimetres.

30. GRAPHOMETER WITH COMPASS AND HORIZONTAL SUN DIAL.
Engraved brass, dore au feu. Signed: Roma, Italian, 17th century. 5¾ by 27 centimetres.

31. COMPASS.
Brass, mounted in brass globe decorated with stars and provided with 3 small feet. French, 18th century. Diameter 4 centimetres, Height with foot 12½ centimetres.

32. COMPASS.
Round, brass; cardan's suspension. In round rosewood box, French, end of 18th century. Diameter 7 centimetres.

33. PRECISION COMPASS.
Round, engraved brass with brass handle. French, 18th century. Diameter 18½ centimetres, length 38½ centimetres.

34. DEMI-CIRCULAR DIOPTER-INSTRUMENT FOR MEASURING ANGLES WITH AFFIXED QUADRANT.

Squadre mobile. Engraved brass, dore au feu. Signed: Vincenti Miotti Fecit, Roma, 17th century. Ref.: Cat. Mensing, No. 145. Length 23 centimetres.

38. CLINOMETER.
Engraved ivory. Signed: Dolland, London 18th century. 4¼ by 16¼ centimetres.

40. MID-DAY SHOOTER SEXTANT.
(With compass levels and horizontal sundial). Engraved brass. French, early 19th century. Diameter 9 centimetres.

41. OCTANT.
Engraved brass and ebony with inlaid ivory. Dutch, 18th century. 29 by 36 centimetres.

44. SAND GLASS.
With one glass in wood with 4 columns. Probably So. German, 16th century. Height 19 centimetres.

45. ARMILLAR SPHERE.
Engraved brass in brass seat on 4 legs. Probably French, 18th century. Diameter of globe 9 centimetres. Total height 11½ centimetres.

48. TELESCOPE.
Black morocco leather cover. The two disengaging pieces covered with green parchment with decorations in gold, wooden mounting, 18th century. Length fully drawn out 49 centimetres, telescoped 20 centimetres.

49. MIRROR TELESCOPE.
Brass, on curved tripod. Signed: G. Adams, London, 18th century. Height 77 centimetres.

50. MIRROR TELESCOPE.
Brass on curved tripod. Signed: B.E. van der Bildt, Amsterdam, 18th century. Height 57 centimetres.

51. MIRROR TELESCOPE.
Brass on curved tripod. Telescope covered with black leather, 18th century. Height 49 centimetres.

52. HORIZONTAL SUN DIAL.
Octagonal, engraved silver, with silver gnomon. Signed: Chapopot. French, probably 18th century.

53. CERCLE ENTIER (WHOLE CIRCLE)
Bronzed brass in original wooden box. Signed: Ramsden, London, 18th century. Diameter 26 centimetres.

54. THEODOLITE.
Brass, in original wooden box. Signed: J. M. Klemm & Zoon, Royal Instrument Makers, late 18th century. Length 54½ centimetres, height 21 centimetres.

55. PLANETARIUM.
On black wooden foot. Cardboard, wood and brass construction. French, early 19th century. Height 54 centimetres, diameter 32 centimetres.

57. SUN DIAL.
Polygonic. Painted cardboard polygone on wooden foot.

Italian, late 18th century. Height 26 centimetres.

58. ARMILLAR SPHERE.
Engraved brass, dore au feu on profiled gilt brass foot. Signed: C. Maru Caboga, signed below in foot G. M. F. C., 1743. Height 36 centimetres. Diameter 16½ centimetres.

60. INKWELL.
In the shape of a golb, brass pasted with map of the world in colors. English, 19th century. Diameter 6½ centimetres.

61. GUN TANGENT SIGHT.
Engraved brass, dore au feu.

62. EQUATORIAL SUN DIAL.
Sexagonal, engraved brass, dore au feu with silver. Signed: Andreas Vogler, 17th century.

63. EQUATORIAL SUN DIAL.
Sexagonal, engraved brass, dore au feu with silver. Signed: Johan Schretteger, 17th century.

64. CELESTIAL GLOBE.
On profiled bronze leg. Signed: Matthaues Seutter, German, 18th century. Diameter globe 20 centimetres, height 41 centimetres.

65. ASTRONOMICAL CLOCK (WITH 10 DIALS).
Chased and engraved brass, dore au feu. Signed: Jeremias Metzker, Clockmaker in Augspurg, 1564.

66. STAR GLOBE.
Engraved brass on profiled iron leg. Signed: C. Plath, Hamburg, late 18th century, diameter 30 centimetres, height 59 centimetres.

67. EQUATORIAL SUN DIAL.
Sexagonal, engraved brass, dore au feu with silver. Signed: Andreas Vogler, 17th century in leather case.

68. HORIZONTAL SUN DIAL.
Octagonal, engraved silver with gilt brass gnomon. Signed: Butterfield, in leather case.

69. GUN TANGENT SIGHT.
Probably part of gun sight. gilt brass.

70. CALENDAR.
Eternal calendar, engraved silver. German, 1700. In leather case.

71. CALENDAR.
Eternal calendar, notebook, engraved silver. German.

72. SUN RING.
Gilt brass, 16th century. Probably German.

73. HALF CIRCULAR DIOPTER INSTRUMENT.
For angle measuring with affixed quadrant (Squadra Mobile). Engraved brass, dore au feu, 17th century, not signed. Italian.

74. ..STROL..BIUM WITH COMP..SS.
Gilt and lacquered wood, Chinese, probably 16th century.
75. H..LF CIRCUL..R DIOPTER INSTRUMENT.
For angle measuring with affixed quadrant (squadra mobile). Engraved brass, dore au feu. Signed: Metz, ..msterdam.
76. S..ND GL..SS.
With one glass, encased in wood with 4 columns.
Probably South German, 16th century.
78. CELESTI..L GLOBE.
On wooden tripod.
79. MIRROR TELESCOPE.
Brass without tripod, 18th century. Probably Dutch.

THE M..RINE MUSEUM, BOSTONI..N SOCIETY.

John G. Weld

In addition to the ship models, the collection consists of many paintings, lithos, prints and photos of all classes of ships as well as a library consisting of books pertaining to nautical subjects.

We have a pretty complete record of all vessels of Boston registry, many old log books, some dating back to the 1770's and no end of papers and documents, one of which is a Letter of Marque taken out for the War of 1812.

The whaling collection consists of many lithos and prints of whaling scenes, and a large assortment of scrimshaw work and whaling gear. We have recently acquired a splendid model of the whaler L..GOD.. made by Bernard Hart. You may recall a model of a whaleboat containing all the gear, made also by Bernard Hart which we have had for some time.

Of our ship models, the most outstanding is that of the CONSTITUTION, made by Lt. Col. Spicer of the Marine Corps. This is considered the most correct model of that famous frigate that can be found anywhere. Col. Spicer's widow paid us a visit some time ago and told us that her husband's researches were simply exhaustive before he laid a plank.

Another excellent model is that of the Privateer R..MBLER made by Elmer Tanner, originally for Mr. Charles Taylor of the Boston Globe.

There are many models worth studying, one of which is the U. S. S. OHIO, one of the few ships of the line of our

old wooden navy, others are the small bone models of which we have several.

One very interesting exhibit is a sealing expedition which shows two vessels in the ice with their crews killing and skinning seals. The model of the ALERT we say little about. The spars and rigging are wholly out of proportion. Except for the name it is doubtful if there is anything about it that relates to Dana's ALERT.

We have an oversize model of the ship COHOTA made in China. Unfortunately the case takes up so much room that valuable light is shut off and it is seldom that one can get a good view of it. Other unique models consist of a molasses drougher, a pinkie schooner and a banker of the type common in the 1850's.

A recent exhibit consisted of 15 colored pictures of the "Diamond Rock" incident. This took place in 1805 during the Napoleonic Wars. Diamond Rock commanded the Port of Diamant, Martinique. English sailors and marines occupied it with mounted batteries for a year at which time their food supply gave out and they were forced to surrender. The position was carried on the admiralty records as H. M. S. Diamond Rock.

THE NEW ENGLAND PINK "TIGER"

Being some notes from Bulletin No. 127 United States Museum Washington, Government Printing Office. 1923.

Driftwood Gaff

Bulletin No. 127 contains a catalog of the watercraft collection in the United States National Museum. It was compiled and edited by Carl W. Mitman. Unfortunately, this fine bulletin is out of print. However, if any member of the Guild pays a visit to Washington, he will find those in charge of the water craft Collection more than happy to help him in any way possible. Mr. Frank A. Taylor, present Head Curator Department of Engineering and Industries has written me, "all of the material in the bulletin may be freely reproduced and we would be happy to have it used as you plan". The introductory paragraph to the bulletin is of interest to the Guild.

"Few problems with which man has had to deal are of greater consequence to his well being and material development than aquatic transportation. Primitive man had forced

upon him the necessity of obtaining food and covering from the animals which inhabit the waters; consequently, one of his earliest efforts was to secure the means of flotation whereby the possibilities of supplying his needs were immeasurably increased".

"The fact that fishing vessels and boats constituted an important feature of the exhibits displayed by the United States Fish Commission at the various expositions in which it participated at home and in foreign countries, resulted in bringing together, as part of the collection, a series of models, largely prepared under the direction of Capt. Joseph W. Collins, which constitutes a most comprehensive and exhaustive epitome of naval architecturs as applied to this country since its settlement".

The foregoing gives just a hint from the forty page Introduction to Bulletin No. 127. With those thoughts in mind, I feel as if I can proceed with the story of the "pinky" TIGER as given on page 135. Here it is.

"The "pinky" TIGER, of which this is a miniature, was built between 1830 and 1840 at Essex, Mass., and for several years was one of the staunchest and most seaworthy vessels employed in the cod and mackeral fisheries from New England. This model was constructed from the lines and sail plan of a pinky and is typically representative of a peculiar class of New England fishing vessels extensively employed between 1820 and 1850.

Full round bow; curved stem, with gammon knee at top and strong rake below water; long, round floor; rather shallow keel; heavy drag; moderately long easy run; sharp stern surmounted by a "pink" strong sheer; flush deck; cabin under deck forward; deck fitted with cabin companionway; hatches; binnacle; fish kids, etc. boat stowed on deck; schooner rigged, carrying a single topmast and four sails - mainsail, foresail, jib and main staysail.

Dimensions of vessel - Length over all, 52 feet; water line 48 feet; beam, 13 feet 3 inches; depth of hold, 5 feet; bowsprit, outboard, 14 feet; foremast above deck, 40 feet; foreboom, 17 feet 6 inches; foregaff, 16 feet 6 inches; main mast above deck, 42 feet; topmast, 18 feet; main boom, 33 feet; main gaff, 18 feet. Scale, one half inch equals one foot.

The TIGER, under command of Capt. James Patillo, became famous for her connection with incidents of historical interest. On one occasion she was chased by a British war brig in the Bay of Fundy. The sudden lifting of a fog disclosed to

the British officers the little pinky not far off and within the limit, where it was claimed, American fishermen had no right to go. The English fired a gun for the Yankee to heave to. All sail was crowded on both vessels. Soon the blank cartridge was followed by a round shot one of which passed through the schooner's sails. But the undaunted Patillo sent his crew below after the sails were set and trimmed and, lying on his back on deck steered the little vessel, which showed a clean pair of heels to her pursuer. (Comment. - Pinks steered with a long tiller.)

On another occasion the TIGER was frozen in while in Fortune Bay, Newfoundland, after a fare of fish in winter. The local authorities determined to capture her, and an armed party, far outnumbering the crew, of the pinky, went out near her on the ice. Capt. Patillo, though having only a few old muskets, defied them. He was a giant in size, and his appearance and reckless courage intimidated his enemies, who returned crestfallen to their homes. Cat. No. 76,242 U. S. N. M."

There are two good models of New England pinks that I know about. One made by Walter Leavit (Doc) is located in the Marine Room, Peabody Museum, Salem, Mass. Another is located in the Newark Museum, 49 Washington Street, Newark, N. J. Fine glossy prints of the latter are available. Ask for No. 6972K. Model made by and purchased from Capt. J. S. Nickerson, 1931.

Very little iron work was used on the pinky. It had to be all made by hand at the local forge and was expensive. They had plenty of good oak in Essex in those days and used it generously. Mr. Lewis H. Story and others have told me that these little vessels were sometimes built inland at a considerable distance from the water. In winter they were skidded to the water's edge with the help of ox teams. The general color was green because it was cheap. The under body was often tarred. In the model at Salem, the scribed in planks were of various widths, not at all in keeping with the usual plank job. To any one whose interest has been aroused in these little vessels, I recommend the books by Mr. Charles G. Davis, SHIPS OF THE PAST and Mr. Howard I. Chappele's AMERICAN SAILING CRAFT. These are expensive books; but a good public library should have them. The pinky makes an unusual half model with its characteristic white stripe, strong sheer and pink stern. The pink stern resembles the tail of a swimming gull. It was generally made of three inch oak. The top was curved in order to hold the boom when the main sail was lowered.

THE RACING FISHERMAN "COLUMBIA"

John M. Minuse

Launched April 17, 1923 Builder - A.D. Story, Essex, Mass.

Design No. 236 - Burgess & Paine - Succeeded by Paine, Belnap & Skene, Boston, Mass.

Rigged by George Roberts in 4 days.
Outfilled by Atlantic Supply Co.
Spars by George E. Thurston.
Sails - Woodberry Duck by Turner Halsey, Boston.
Dories - 24 taken aboard at Shelbourne.
Bolt Rope - New Bedford Cordage Co., New Bedford, Mass.
Running Rigging - Whitlock Waterflex, Whitlock Cordage, Boston.
Salt Banker - Sailing Master - Capt. Alden Geele
Racing Master - Capt. Ben Pine
Lost with all hands August 24, 1927
Data from - Files of Atlantic Fisherman, N.Y. Public Lib.

Dimensions of Sch. COLUMBIA Courtesy of Donald Warnick Phillips (Dec), Gloucester, Mass., April 4, 1928.

Length over all	142'-0"
Length load water line	110'-0"
Draft	15'-0"
Beam	27"-0"
Displacement	270 Tons
Sail Area	9770 Square feet

Spars

Description	Length	Max Diameter
Foremast	83'-0"	19"
Foretopmast	46'-0"	11"
Boom	33'-9"	10"
Gaff	33'-6"	10"
Mainmast	96'-0"	20"
Boom	80'-0"	14"
Gaff	47'-0"	11"
Topmast	51'-0"	11"
Bowsprit	17'-6"	16"
Forestaysail boom	27'-6"	8"

Foremast has 75' above deck Rake 5" in 64'
Main mast has 83' above deck Rake 2'-4" in 70'
Foremast head 11'-0"
Mainmast head 12'-0"

Suggestions:-

Helpful suggestions welcome as it is believed this vessel was not built according to the designer's lines and sail plan. "Deck layout left to the builder", Mr. Belnap. Block list for this vessel also available. Two very fine models of this vessel - Peabody Museum, Marine Hall, Salem, Mass. These copies made July 8, 1948 are non-commercial. Perhaps, Corinthian is the better term.

Block list for Gloucester fisherman COLUMBIA.

Main Sheet	1	treble	14"	Block
" "	1	double	14"	"
" " Leader	1	single	8"	"
Main Peak Halyard	4	single	14"	" on mast
" " "	3	"	14"	" on gaff
" Throat Halyard	2	double	14"	" on mast
" " "	1	"	14"	" on gaff, port side.
" " "	1	single	14"	" " " , St. bd. side
Main Peak Whip	2	double	8"	"
" Throat "	2	"	8"	"
Stays'l Halyard	1	single with 2 single swivel blks. 8"		on main
" "	2	"	8"	on fore
Main Tops'l "	2	"	8"	Block
" " Sheet	2	"	8"	" , under gaff at throat
Main Boom Topping Lift	1	"	9"	"
" " " "	1	double	8"	
Fore Sheet	1	double	12"	"
" "	1	single	12"	"
" Peak Halyard	3	single	12"	" on mast
" " "	2	"	12"	" on gaff
" Throat "	2	double	12"	" on mast
" " "	1	treble	12"	" on gaff
" Peak Whip	1	double	8"	"
" " "	1	single	8"	"
" Throat "	2	double	8"	"
" Tops'l Halyard	2	single	7"	"
" " Sheet	2	"	7"	"
" " "	1	"	7"	" under gaff at throat
" Book Topping Lift	1	"	7"	?
Main Boom Tackle	1	double	9"	Block
" " "	1	single	11"	"
Fore " "	1	double	8"	"
" " "	1	single	8"	"
Cross Tackle	2	double	8"	"
" "	2	single	8"	?